

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2017 JEDEC THIS *REGISTERED OUTLINE* HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.

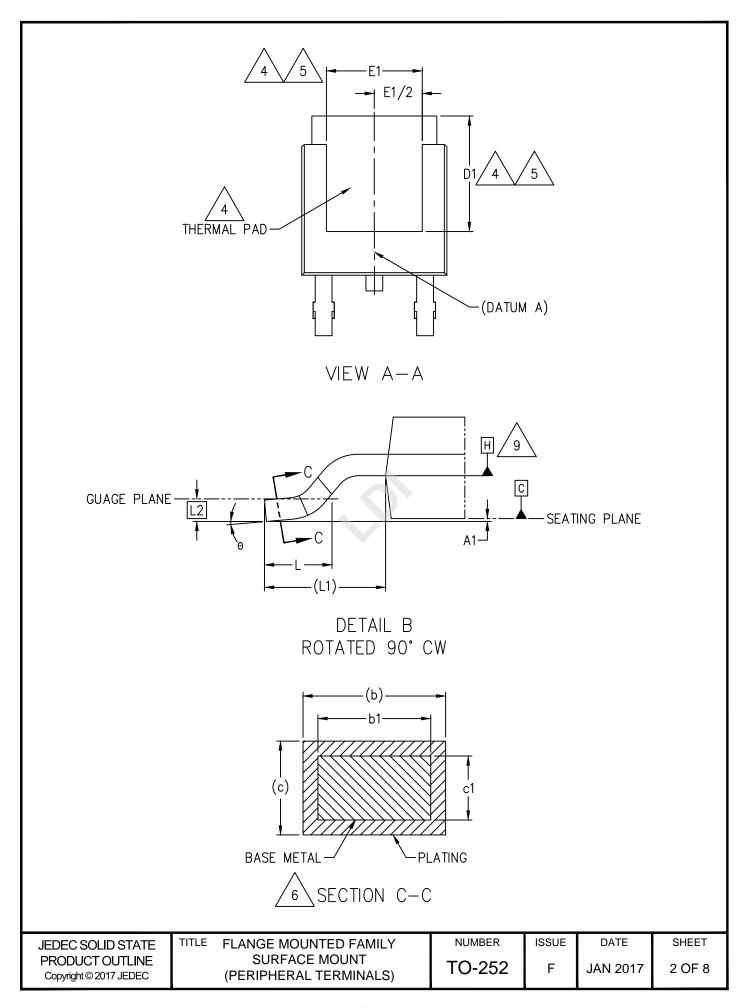
FLANGE MOUNTED FAMILY
SURFACE MOUNT
(PERIPHERAL TERMINALS)

PACKAGE DESIGNATOR R-PSFM-G NUMBER
TO-252

ISSUE F DATE
JAN 2017

SHEET

1 OF 8



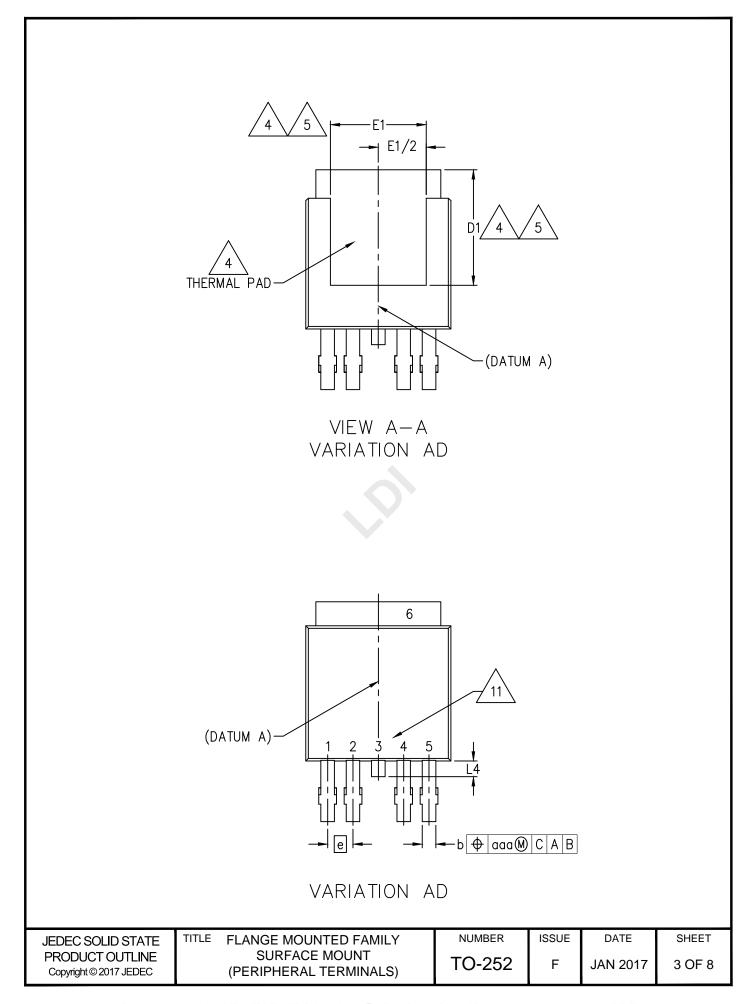


TABLE 1

			VAR	IATIONS (	ALL DIM	IENSION	S SHOW	N IN INC	HES)			
SYMBO		AA		NOTES		AB		NOTES		AC		NOTES
L	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	NOTES
Α	0.086	ı	0.094		0.086	ı	0.094		0.070	-	0.080	
A1	ı	ı	0.005		_	ı	0.005		0.000	0.002	0.005	
b	0.025	ı	0.035	6	0.025	ı	0.035	6	0.025	_	0.035	6
b1	0.025	0.028	0.031	6	0.025	0.028	0.031	6,10	0.025	0.028	0.031	6
b2	0.030	_	0.045		0.030	-	0.045		0.025	_	0.035	
b3	0.195	_	0.215	4	0.195	-	0.215	4	0.218	0.223	0.228	4
С	0.018	_	0.024	6	0.018	-	0.024	6	0.007	_	0.015	6
c1	0.016	_	0.022	6	0.016	-	0.022	6,10	0.007	0.010	0.013	6
c2	0.018	-	0.035	6	0.018	ı	0.035	6	0.007	_	0.015	6
D	0.235	0.240	0.245	7,8	0.210	0.215	0.220	7,8	0.237	0.242	0.247	7, 8
D1	0.205	ı	-	4,5	0.180	ı	ı	4,5	0.160	_	_	4, 5
E	0.250	ı	0.265	7,8	0.250	ı	0.265	7,8	0.233	_	0.243	7, 8
E1	0.170	ı	-	4,5	0.150	ı	ı	4,5	0.080	_	_	4, 5
е	0	.090 BS	iC .		0	.090 BS	SC .		0	.090 BS	SC .	
Н	0.370	_	0.410		0.370	-	0.410		0.370	_	0.390	
L	0.055	0.060	0.070		0.055	0.060	0.070		0.037	0.042	0.047	
L1	0	.108 RE	F		0	.105 RE	F		0	.098 RE	F	
L2	0	.020 BS	iC		0	.020 BS	SC .		0	.010 BS	C	
L3	0.035	-	0.050	4	0.060	ı	0.080	4	0.030	_	0.050	4
L4	_	_	0.040		_	-	0.040		_	_	0.040	
L5	0.045	_	0.060	3	0.045	_	0.060	3	NA	NA	NA	
Θ	0.	_	10°		0.	-	8°		0.	_	8°	
Θ1	0.	_	15 <b>°</b>		0,	-	15°		0,	_	15°	
N		3				3				3		10
aaa		0.010				0.010				0.010		
NOTES	1, 2				1, 2				1, 2			
REF	10-41	8			10-41	8			10-41	8		
ISSUE	D				D				D			

JEDEC SOLID STATE	TITLE FLANGE MOUNTED FAMILY	NUMBER	ISSUE	DATE	SHEET
PRODUCT OUTLINE Copyright © 2017 JEDEC	SURFACE MOUNT (PERIPHERAL TERMINALS)	TO-252	F	JAN 2017	4 OF 8

TABLE 2

	VARI	ATIONS	(ALL DII	MENSIONS	SHOWN	IN INC	HES)	
SYMB0		AD		NOTES		NOTES		
L	MIN	NOM	MAX	INUIES	MIN	NOM	MAX	NOTES
Α	0.086	-	0.094		0.047	-	0.055	
A1	_	_	0.005		0.000	_	0.008	
b	0.020	_	0.028	6	0.027	_	0.036	6
b1	0.020	0.023	0.026	6	0.027	0.030	0.033	6
b2	0.024	_	0.031		0.027	-	0.040	
b3	0.170	-	0.215	4	0.209	0.217	0.224	4
С	0.018	ı	0.024	6	0.010	-	0.016	6
c1	0.016	ı	0.022	6	0.010	0.012	0.014	6
c2	0.018	-	0.035	6	0.010	-	0.016	6
D	0.235	0.240	0.245	7,8	0.255	0.260	0.265	7, 8
D1	0.190	ı	1	4,5	_	0.205	1	4, 5
Е	0.250	_	0.265	7,8	0.239	_	0.249	7, 8
E1	0.170	_	0.210	4,5	0.201	_	0.224	4, 5
е	0.	.045 BS	C		0.090 BSC			
Н	0.370	_	0.410		0.339	_	0.370	
L	0.055	0.060	0.070		0.039	0.047	0.055	
L1	0	.108 RE	F		0.075 REF			
L2	0.	.020 BS	C		0	.010 BS	С	
L3	0.035	_	0.050	4	0.012	_	0.028	4
L4	_	_	0.040		_	_	0.030	
L5	NA	NA	NA		NA	NA	NA	
Θ	0.	_	10°		0.	_	10 <b>°</b>	
Θ1	0.	-	15°		0,	-	15°	
N		5		11		3		10
aaa		0.010				0.010		
NOTES	1, 2				1, 2			
REF	10-42	27			10-45	56		
ISSUE	Ε				F			

						1
JEDEC SOLID STATE	TITLE FLANGE MOUNTED FAMILY	NUMBER	ISSUE	DATE	SHEET	l
PRODUCT OUTLINE	SURFACE MOUNT	TO-252	F	JAN 2017	5 OF 8	l
Copyright © 2017 JEDEC	(PERIPHERAL TERMINALS)	1 0 202		0, 2011	0 0. 0	ı

TABLE 3

			VARIAT	TONS (AL	L DIMEN	ISIONS	SHOWN	IN MILLIM	ETERS)			
SYMBO		AA		NOTES		AB		NOTES		AC		NOTES
L	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	NOTES
Α	2.184	ı	2.388		2.184	_	2.388		1.778	-	2.032	
A1	ı	ı	0.127		-	-	0.127		0.000	0.051	0.127	
Ь	0.635	ı	0.889	6	0.635	-	0.889	6	0.635	-	0.889	6
b1	0.635	0.711	0.787	6	0.635	0.711	0.787	6,10	0.635	0.711	0.787	6
b2	0.762	ı	1.143		0.762	1	1.143		0.635	-	0.889	
b3	4.953	ı	5.461	4	4.953	-	5.461	4	5.537	5.664	5.791	4
С	0.457	ı	0.610	6	0.457	-	0.610	6	0.178	-	0.381	6
c1	0.406	=	0.559	6	0.406	_	0.559	6,10	0.178	0.254	0.330	6
c2	0.457	ı	0.889	6	0.457	_	0.889	6	0.178	-	0.381	6
D	5.969	6.096	6.223	7,8	5.334	5.461	5.588	7,8	6.020	6.147	6.274	7, 8
D1	5.207	1	ı	4,5	4.572	_	_	4,5	4.064	-	_	4, 5
E	6.350	ı	6.731	7,8	6.350	-	6.731	7,8	5.918	-	6.172	7, 8
E1	4.318	ı	-	4,5	3.810	_	_	4,5	2.032	_	_	4, 5
e	2.	.286 BS			2	.286 BS			2	.286 BS	SC .	
Η	9.398	ı	10.41 4		9.398	-	10.41		9.398	_	9.906	
L	1.397	1.524	1.778		1.397	1.524	1.778		0.940	1.067	1.194	
L1	2	.743 RE	F		2	.667 RE	F		2	.489 RE	F	
L2	0.	.508 BS	iC		0	.508 BS	SC .		0	.254 BS	SC .	
L3	0.889	ı	1.270	4	1.524	_	2.032	4	0.762	_	1.270	4
L4	ı	ı	1.016		_	_	1.016		_	_	1.016	
L5	1.143	-	1.524	3	1.143	_	1.524	3	NA	NA	NA	
Θ	0.	-	10°		0,	_	8°		0,	_	8°	
Θ1	0.	-	15 <b>°</b>		0.	_	15°		0,	_	15 <b>°</b>	
N		3				3				3		10
aaa		0.254				0.254				0.254		
NOTES	1, 2				1, 2				1, 2			
REF	10-45	6			10-45	56			10-45	56		
ISSUE	F				F				F			

JEDEC SOLID STATE	TITLE	FLANGE MOUNTED FAMILY	NUMBER	ISSUE	DATE	SHEET
PRODUCT OUTLINE Copyright © 2017 JEDEC		SURFACE MOUNT (PERIPHERAL TERMINALS)	TO-252	F	JAN 2017	6 OF 8

TABLE 4

	VARIATI	ONS (A	LL DIME	NSIONS S	HOWN I	N MILLIN	METERS)		
SYMBO		AD		NOTES		ΑE		NOTES	
L	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	INUILS	
Α	2.184	_	2.388		1.200	ı	1.400		
A1	ı	ı	0.127		0.000	ı	0.200		
b	0.508 - 0.7		0.711	6	0.685	ı	0.910	6	
b1	0.508	0.584	0.660	6	0.685	0.762	0.840	6	
b2	0.610	_	0.787		0.685	ı	1.010		
b3	4.318	1	5.461	4	5.300	ı	5.700	4	
С	0.457	_	0.610	6	0.250	ı	0.410	6	
c1	0.406	-	0.559	6	0.250	0.300	0.350	6	
c2	0.457	-	0.889	6	0.250	I	0.410	6	
D	5.969	6.096	6.223	7,8	6.480	6.600	6.720	7, 8	
D1	4.826	_	-	<b>4,</b> 5	_	5.200	ı	4, 5	
Е	6.350	_	6.731	7,8	6.080	ı	6.320	7, 8	
E1	4.318	_	5.334	4,5	5.100	ı	5.700	4, 5	
е	1.	.143 BS			2.290 BSC				
Н	9.398	_	10.41		8.600	_	9.400		
L	1.397	1.524	1.778		1.000	_	1.400		
L1	2	.743 RE	F.		1.900 REF				
L2	0.	.508 BS	iC .		0	0.254 BSC			
L3	0.889	_	1.270	4	0.300	-	0.700	4	
L4	_	_	1.016		_	_	0.762		
L5	NA	NA	NA		NA	NA	NA		
Θ	0.	_	10°		0.	ı	10°		
Θ1	0.	_	15 <b>°</b>		0,	_	15 <b>°</b>		
N		5		11		3		10	
aaa		0.254				0.254			
NOTES	1, 2				1, 2				
REF	10-45	66			10-45	6			
ISSUE	F				F				

							1
JEDEC SOLID STATE	TITLE	FLANGE MOUNTED FAMILY	NUMBER	ISSUE	DATE	SHEET	l
PRODUCT OUTLINE		SURFACE MOUNT	TO-252	F	JAN 2017	7 OF 8	l
Copyright © 2017 JEDEC		(PERIPHERAL TERMINALS)	. 0 _0_				ı

## NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009.

2. DIMENSIONS ARE IN INCHES AND MILLIMETERS.

3

LEAD DIMENSION UNCONTROLLED IN L5.

/ 4 \

THERMAL PAD CONTOUR OPTIONAL WITHIN DIMENSIONS b3 AND L3, AND D1 AND E1.

DIMENSIONS D1 AND E1 ESTABLISH A MINIMUM MOUNTING SURFACE FOR THERMAL PAD.

/ 6 \

SECTION C-C DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.005 AND 0.010 INCHES FROM THE LEAD TIP.



DIMENSION D DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION. INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.006 INCHES PER END.

DIMENSION E DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.006 INCHES PER SIDE.



THE PACKAGE TOP MAY BE SMALLER THAN THE PACKAGE BOTTOM. DIMENSIONS D AND E ARE DETERMINED AT THE OUTERMOST EXTREMES OF THE PLASTIC BODY EXCLUSIVE OF MOLD FLASH, TIE BAR BURRS, GATE BURRS AND INTERLEAD FLASH, BUT INCLUDING ANY MISMATCH BETWEEN THE TOP AND BOTTOM OF THE PLASTIC BODY.



DATUMS A AND B TO BE DETERMINED AT DATUM PLANE H.



4 TERMINAL LOCATIONS ARE SHOWN, ONLY 3 ARE FUNCTIONAL, LEAD NUMBER 2 WAS REMOVED.

11 6

6 TERMINAL LOCATIONS ARE SHOWN, ONLY 5 ARE FUNCTIONAL, LEAD NUMBER 3 WAS REMOVED.

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2017 JEDEC TITLE FLANGE MOUNTED FAMILY SURFACE MOUNT (PERIPHERAL TERMINALS)

NUMBER TO-252

ISSUE F

DATE

JAN 2017

SHEET 8 OF 8

## CHANGE RECORD

IF THE CHANGE INVOLVES ANY WORDS ADDED OR DELETED (EXCLUDING DELETION OF ACCIDENTALLY REPEATED WORDS), THE CHANGE IS TO BE INCLUDED BELOW. PUNCTUATION CHANGES MAY OR MAY NOT BE INCLUDED.

INITIAL ISSUE: A	DATE: SEPTEMBER 1996	ITEM NUMBER: 10-209
CHANGE RECORD HISTORY:		
ISSUE: D	DATE: JUNE 2002	ITEM NUMBER: 10-418
ISSUE: E	DATE: JUNE 2004	ITEM NUMBER: 10-427
ISSUE: F	DATE: JANUARY 2017	ITEM NUMBER: 10-456
	•	
LOCATION:	CHANGED FORM:	CHANGED TO:
ALL SHEETS		UPDATED TO CURRENT FORMAT
ALL SHEETS	MISSING LEADING ZERO	ADDED LEADING ZERO
	(E.G000)	(E.G. 0.000)
SHEET 1, 3		DELETE THE NUMBER OF TERMINALS (E.G. 3X b, 2X b2)
SHEET 4 - 5		ADD DIMENSION aaa
SHEET 5		ADDED VARIATION AE
SHEET 6 - 7		ADDED DIMENSION TABLES IN MILLIMETERS
SHEET 8, NOTE 1	ASME Y14.5M-1994	ASME Y14.5M-2009
SHEET 8, NOTE 2		ADDED MILLIMETERS
SHEET i		ADDED CHANGE RECORD SHEET

JEDEC SOLID STATE	TITLE FLANGE MOUNTED FAMILY	NUMBER	ISSUE	DATE	SHEET
PRODUCT OUTLINE Copyright © 2017 JEDEC	SURFACE MOUNT (PERIPHERAL TERMINALS)	TO-252	F	JAN 2017	i